BEFORE THE

FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON, D.C. 20554

In the Matter of the Petition of	)	
	)	
DIRECTV ENTERPRISES, INC.	)	RM No. 9118
	)	
To Amend Parts 2, 25 and 100 of the Commission's Rules to Allocate Spectrum for the Fixed-Satellite Service and the Broadcasting-Satellite Service	)	

COMMENTS OF LORAL SPACE & COMMUNICATIONS, LTD.

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July 31, 1997

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Loral Space & Communications Ltd. ("Loral"), by its attorneys, hereby files its comments in response to DIRECTV Enterprises, Inc.'s ("DIRECTV") Petition for Rulemaking in the above captioned proceeding.[1]

I. Introduction and Summary

Loral, a leading satellite manufacturer and satellite service provider, supports the innovative use of radio spectrum. The concepts advanced in DIRECTV's Petition for Rulemaking would foster

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[1] In the Matter of the Petition of DIRECTV Enterprises, Inc. To Amend Parts 2, 25 and 100 of the Commission's Rules to Allocate Spectrum for the Fixed-Satellite Service and the Broadcasting-Satellite Service, *Petition for Rulemaking* in RM No. 9118 (filed June 5, 1997) ("DIRECTV's Petition for Rulemaking").

competition and promote the public interest if, upon sufficient study, they prove capable of implementation. The current limitations on full-CONUS broadcasting-satellite service spectrum for Direct-to-Home services require that the Commission promptly release a Notice of Proposed Rulemaking or Notice of Inquiry to address DIRECTV's petition for spectrum allocation. The important issues raised by DIRECTV's Petition for Rulemaking deserve to be addressed in the context of an NPRM or NOI where, in addition to addressing spectrum requirements for DTH, the industry can provide the Commission with necessary technical and feasibility studies on spectrum allocation for BSS and fixed-satellite service in the proposed bands.

II. The Commission Would Foster Competition and Promote the Public Interest by Allocating Additional Spectrum for DTH Use

Without additional spectrum, orbital locations, and significant technical innovation in the use of radio spectrum, the communications industry will confront very substantial obstacles in meeting the growing demand for radio-based services. Today, there is great competition for the limited number of orbital locations and insufficient bandwidth in traditional FSS and BSS commercial frequency bands, combined with burgeoning demand for high-quality service in the U.S. The shortages are due in major part to heavy demands for different services, including geostationary fixed satellite service, non-geostationary satellite service, fixed terrestrial service, and government services, all of which are vying for access to the same limited radio spectrum.

The widespread implementation of High Definition Television ("HDTV") is but one example of a new service that will create great demand on the satellite transmission capacity of satellite service providers. Even with current compression technology, DTH providers will need additional spectrum to accommodate all of the HDTV programming that the more than 165 cable networks,[2] broadcasters and future networks will provide. Allocation of additional spectrum would contribute additional resources to provide a publicly beneficial and economically feasible HDTV platform.

This spectrum scarcity is magnified in the 12.2-12.7 GHz band due to the limitations in the BSS Plan for Region 2 which limit full-CONUS spectrum. The limited orbital assignments and frequency bands restrict the amount of information that can flow through satellite systems. Enhanced services and expanded choices for the U.S. consumer can only be provided through additional spectrum that will allow the introduction of new technology and innovative applications.

The DIRECTV proposal deserves industry study. If such studies show that the proposal offers the possibility of satisfying the increased demand for DTH and FSS services, then it should be implemented. Making more spectrum available to a wider variety of service providers will result in increased competition and service

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[2] Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming, CS Docket No. 97-141, Comments of the National Cable Television Association (July 23, 1997) at 23 ("NCTA Comments").

alternatives, which, in turn, will bring increased efficiencies, broader choices, lower prices and more responsive services. Fuller use of the spectrum, and additional BSS spectrum allocations, are in the public interest.

III. Any Allocation of New Frequency Should Be Open to All Potential Multimedia Services.

Loral believes that any new frequency allocations should not be limited to just video transmission, but should be open to all potential multimedia services that would be complementary to video. With the evolution of multimedia technology and platforms, consumers now require combinations of video, audio and data services, including Internet access and tailored content. An "open" policy will allow DTH providers to satisfy these consumer demands and remain competitive in the expanding multichannel video programming distribution ("MVPD") market. Placing restrictions on the services offered by satellite service providers will not allow them to provide the flexibility their customers demand, or remain competitive in the MVPD marketplace. For example, under a frequency allocation not restricted to traditional DTH service, consumers could receive applications such as "push technology" which allows the downloading of multimedia data, including videos and software, to a digital video disc. Permitting data-related services, in conjunction with the standard video transmission, will expand the portfolio of available services.

IV. Further Industry Study is Required to Corroborate the Feasibility of Allocating Spectrum to BSS and FSS in the 17.3-17.8 GHz and 24.75-25.25 GHz Bands.

While Loral is supportive of the DIRECTV concept as expressed in its Petition for Rulemaking, it cautions against implementing any changes in the table of Frequency Allocations until adequate studies have been performed to determine the impact that such changes would have on other wireless systems and service providers. These studies can be provided to the Commission within the context of an NPRM or NOI. It is only after the impact of such changes are well understood that any significant changes can be considered for universal adoption. In determining the public interest, the Commission must know the performance impact on competing service providers in the proposed bands and take those results fully into account in formulating policy. The Commission should encourage the industry to conduct and publish studies on the impact of BSS and FSS allocation in the 17.3-17.8 GHz and 24.75-25.25 GHz bands before allocating such spectrum. The DIRECTV petition does not provide any detailed analysis of coordination issues. These issues must be resolved before the plan can be approved. Specifically, analysis is required of possible interference resulting from adoption of the new BSS plan and the current BSS plan to use spot beams with multiple uplink sites. The new BSS and the proposed NGSO services that require the 17.3 to 17.8 GHz band as an uplink for gateway terminals also may spawn challenging interference issues. If these reverse band coordination issues can be resolved, Loral sees no reason why the FCC

should not allow for the increased allocation of frequency for BSS services.

V. The Commission Should Adopt a 4.5° Orbital Spacing Policy To Increase Spectrum Resources.

Loral concurs with DIRECTV's view that it is in the public interest to adopt a 4.5° orbital spacing policy in order to increase the available spectrum for DTH and other services in the United States.[3] Because the new services from the interlaced 4.5° orbital positions will be operating in a higher frequency than the existing services, the same size consumer dish can provide service with no service degradation. At the proposed downlink frequency and current dish sizes, the dish for this service will have sufficient directivity to keep the interference levels from adjacent satellites at acceptable levels. Thus, by reducing the orbital spacing, BSS providers not only will be able to maintain the same high-quality service consumers have come to expect in the provision of DTH services, but they also will be able to expand the variety of program offerings and services.

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[3] DIRECTV's Petition for Rulemaking at 7-8.

CONCLUSION

For the reasons stated herein, Loral respectfully requests that the Commission commence an NPRM or NOI to address (1) the need for additional DTH spectrum to foster competition and promote the public interest; (2) the ability to offer all potential multimedia services in any new spectrum allocation; (3) the need for and provision of industry feasibility studies in the 17.3-17.8 GHz and 24.75-25.25 GHz bands; and (4) the benefits of 4.5° orbital spacing.

Respectfully submitted,
Loral Space & Communications Ltd.

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July 31, 1997

CERTIFICATE OF SERVICE

I, C. Grace Campbell, hereby certify that I have caused the foregoing "Comments of Loral Space & Communication, Ltd." in DIRECTV Enterprises, Inc.'s Petition for Rulemaking, No. 9118, to be served this 31st day of July, 1997, via hand delivery to the following individual:

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